



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/640,851	08/14/2003	Jon H. Bechtel	GEN10 P-357C	9140
28469	7590	08/26/2004	EXAMINER	
PRICE, HENEVELD, COOPER, DEWITT, & LITTON, LLP/GENTEX CORPORATION 695 KENMOOR, S.E. P O BOX 2567 GRAND RAPIDS, MI 49501			LUU, THANH X	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/640,851

Applicant(s)

BECHTEL ET AL.

Examiner

Thanh X Luu

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 0104.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election with traverse of Group III, claims 12-21 in Paper No. 072004, is acknowledged. The traversal is on the ground(s) that the inventions are not distinct. This is not found persuasive because the claims of Group III do not require any filters. Likewise, the claims of Groups I and II do not require an opening to be several focal lengths in front of the image sensor. Thus, the inventions are distinct. Therefore, the requirement is still deemed proper and is therefore made FINAL.

Claims 1-21 are currently pending. Claims 1-11 are withdrawn.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the more than two lenses must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2878

5. Claims 12-19 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 12, "the vehicle" lacks proper antecedent basis.

Regarding claims 13 and 21, it is unclear how "at least one image" is related to the rest of the invention.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 12, 13 and 20, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Fujii et al. (U.S. Patent 4,867,561).

Regarding claims 12 and 13, Fujii et al. disclose (see Fig. 7) a vehicular vision system, comprising: an image sensor (26) comprising an array of pixel sensors; at least one lens (25) for gathering light rays from a region substantially in front of a vehicle and focusing the gathered light rays on the image sensor; and a housing (21) in which the at least one lens and the image sensor are housed, the housing having an opening (at 21b) positioned several focal lengths in front of the at least one lens for limiting the field of view of the image sensor. An optical axis of the at least one lens passes through the opening.

Regarding claim 20, Fujii et al. disclose (see Fig. 7) a vehicular vision system, comprising: a housing (21) defining an opening (at 21b); an image sensor (26) positioned in the housing spaced from the opening to view a scene through the opening; and at least one lens (25) positioned in the housing, the at least one lens is operative to focus light rays from a scene viewed through the opening onto the image sensor, wherein a field of view of the image sensor is limited by the opening and an axis normal to an image plane of the image sensor passes through the opening.

8. Claim 20, as understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Takenaka et al. (JP 04-198808, published July 20, 1992).

Regarding claim 20, Takenaka et al. disclose (see Fig. 1) a vehicular vision system, comprising: a housing (3) defining an opening (not labeled); an image sensor (8) positioned in the housing spaced from the opening to view a scene through the opening; and at least one lens (8a) positioned in the housing, the at least one lens is operative to focus light rays from a scene viewed through the opening onto the image sensor, wherein a field of view of the image sensor is limited by the opening and an axis normal to an image plane of the image sensor passes through the opening.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 14 and 21, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. in view of Mullins et al. (U.S. Patent 5,614,788).

Regarding claims 14 and 21, Fujii et al. disclose the claimed invention as set forth above. Fujii et al. further disclose moisture detection. Fujii et al. do not specifically disclose generating an exterior light control signal as a function of at least one image taken by the image sensor. Mullins et al. teach (see Figs.) a moisture detection device that generates an exterior light control signal as a function of at least one image. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the claimed exterior light signal in the apparatus of Fujii et al. in view of Mullins et al. to provide extra safety precautions for the vehicle.

11. Claims 15 and 18, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al.

Regarding claim 15, Fujii et al. disclose the claimed invention as set forth above. Fujii et al. do not specifically disclose the focal length as claimed. However, choosing a focal length requires only routine skill in the art and is a matter of design choice. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide the focal length as claimed in the invention of Fujii et al. to provide a more compact configuration or to improve detection, as desired.

Regarding claim 18, Fujii et al. disclose the claimed invention as set forth above. Fujii et al. do not specifically disclose the field of view as claimed. However, choosing a desired field of view requires only routine skill in the art and is a matter of design choice. It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to provide the field of view as claimed in the invention of Fujii et al. to reduce interference and improve detection.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 12-21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 27-31 of U.S. Patent No. 6,653,615. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '615 patent claims (see claim 27) a vehicular vision system, comprising: an image sensor (an array of sensors; see line 3) comprising an array of pixel sensors; at least one lens (at least one lens; see line 4) for gathering light rays from a region substantially in front of a vehicle and focusing the gathered light rays on the image sensor; and a housing (a housing; see line 7) in which the at least one lens and the image sensor are housed, the housing having an opening (opening; see lines 8-9) positioned several focal lengths in front of the at least one lens for limiting the field of view of the image sensor.

Allowable Subject Matter

14. Claims 16, 17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X Luu whose telephone number is (571) 272-2441. The examiner can normally be reached on M-F (6:30-4:00) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thanh X Luu
Primary Examiner
Art Unit 2878